

The opinion in support of the decision being entered today was not written for publication and is not binding precedent of the Board.

Paper No. 9

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte CHRIS W. KORINEK

Appeal No. 1998-0861
Application No. 08/542,231

ON BRIEF

Before HAIRSTON, KRASS, and BLANKENSHIP, Administrative Patent Judges.

HAIRSTON, Administrative Patent Judge.

DECISION ON APPEAL

This is an appeal from the final rejection of claims 1 through 19.

The disclosed invention relates to polygonal-shaped elements on the outer surface of a twist-on connector that are engaged by a tool that rotates the twist-on connector to

Appeal No. 1998-0861
Application No. 08/542,231

thereby join ends of electrical wires to a predefined torque level. The polygonal-shaped elements deform upon application of a torque greater than the predefined torque level in order to prevent excessive torque from damaging the electrical wires and the connector.

Claim 1 is illustrative of the claimed invention, and it reads as follows:

1. A twist-on connector for joining ends of electrical wires to a predefined torque level, wherein the connector comprises a hollow body having an open end, a closed end, and an outer surface extending between the open end and the closed end, the outer surface having elements which form an external polygonal shape for engagement by a tool to effect rotation of the hollow body, wherein the elements deform upon application of greater than the predefined torque level in order to prevent excessive torque from damaging either or both of the electrical wires and the connector.

The references relied on by the examiner are:

Swanson	4,288,657	Sep. 8,
1981		
Williamson	5,148,727	Sep. 22,
1992		
Blaha	Des. 315,139	Mar. 5, 1991

Claims 1 through 6 and 9 through 19 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Swanson in view of Williamson.

Appeal No. 1998-0861
Application No. 08/542,231

Claims 7 and 8 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Blaha in view of Williamson¹.

Reference is made to the brief and the answer for the respective positions of the appellant and the examiner.

OPINION

All of the claims on appeal require deformable polygonal-shaped elements on the outer surface of a twist-on connector that prevent a tool from applying excessive torque to the twist-on connector. The examiner acknowledges (Answer, page 4) that Swanson lacks such deformable polygonal-shaped elements on the outer surface of the wire connector 10. The polygonal shape and the wings alluded to by the examiner (Answer, page 4) are on the inner surface of the Swanson connector (Figure 5, element 28; Figure 4, element 24), and they are not deformable upon application of torque by a tool. Swanson discloses ribs 12a and 12b (Figures 1 and 2) on the outer surface of the connector that function as "torque

¹ Inasmuch as claims 7 and 8 depend from independent claim 1, a proper rejection under 35 U.S.C. § 103(a) must include Swanson in the combined teachings of Blaha and Williamson. For this reason, we will review this rejection as if Swanson was included in the combined teachings applied by the examiner.

limiting means during tool application" (Abstract), however, Swanson is silent as to whether the ribs deform upon application of excessive torque by the tool. Williamson discloses a deformable locking collar/nut 24 that includes a hexagonal-shaped central portion 34 and a deformable head portion 36 (Figure 2). The examiner's contentions to the contrary notwithstanding (Answer, page 4), the hexagonal-shaped central portion 34 of the nut is not engaged by the installation tool 20, and it is not deformed during installation of the nut onto the bolt 26. During installation of the nut 24 onto the bolt 26, the tool 20 twists the deformable head portion 36 to force the material of the head portion into the recesses 27 of the threads of the bolt 26 to thereby lock the nut and the bolt (Abstract, column 3, lines 60 through 62; column 4, lines 24 through 33). The deformable head portion 36 of the nut 24 in Williamson is not an over-torque limiting means. Turning lastly to Blaha, we agree with the examiner (Answer, page 5) that "Blaha ('139) does not disclose the polygonal shaped element being deformable such that the corners will deform at a predetermined torque."

Appeal No. 1998-0861
Application No. 08/542,231

In summary, the rejections are reversed because the examiner has failed to establish a prima facie case of obviousness of the claimed invention.

Appeal No. 1998-0861
Application No. 08/542,231

DECISION

The decision of the examiner rejecting claims 1 through
19 under 35 U.S.C. § 103(a) is reversed.

REVERSED

	Kenneth W. Hairston)	
	Administrative Patent Judge)	
)	
)	
)	
	Errol A. Krass)	BOARD OF
PATENT)	
	Administrative Patent Judge)	APPEALS AND
)	INTERFERENCES
)	
	Howard B. Blankenship)	
	Administrative Patent Judge)	

KWH:tdl

Appeal No. 1998-0861
Application No. 08/542,231

George E. Haas
Quarles and Brady
411 East Wisconsin Avenue
Milwaukee, WI 53202-4497